- 1. THIS PLAN IS FOR PLANTING PURPOSES ONLY.
- 2. THE SPECIFICATIONS FOR ALL WORK INCLUDED IN THIS CONTRACT SHALL BE FROM THE LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION MD-DC-VA (LCA), CURRENT EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY PRIOR TO BEGINNING CONSTRUCTION FOR LOCATION OF ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. THE CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.
- 4. THE CONTRACTOR SHALL LAY OUT AND CLEARLY STAKE ALL PROPOSED IMPROVEMENTS INCLUDED ON THIS PLAN.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR SOIL TESTING AND PREPARATION AS OUTLINED IN THE CURRENT EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES OF THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA (LCA). PREPARATION SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, THE ADDITION OF SOIL AMENDMENTS, FERTILIZERS AND SUPPLEMENTAL TOPSOIL AS INDICATED BY TESTING; AND SUBGRADE, FINAL GRADE AND FINISH GRADE SOIL PREPARATION.
- 6. QUANTITIES AS SHOWN ON THE PLAN SHALL GOVERN OVER PLANT LIST QUANTITIES. THE CONTRACTOR SHALL VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. THE LANDSCAPE ARCHITECT SHALL BE ALERTED BY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION. UNIT PRICES FOR ALL MATERIAL SHALL BE SUPPLIED TO THE OWNER AT BIDDING TIME.
- NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER EXCEPT WHERE NOTED ON PLANS. NO GRUBBING SHALL OCCUR
- 8. ALL CONTRACTORS SHALL BE REQUIRED TO COMPLETELY REMOVE ALL TRASH, DEBRIS AND EXCESS MATERIALS FROM THE WORK AREA AND THE PROPERTY (ESPECIALLY AT ALL CURB, GUTTERS AND SIDEWALKS) DAILY DURING INSTALLATION.
- 9. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM THE SOURCE TO THE JOB SITE AND UNTIL PLANTED.
- 10. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE OWNER SHALL RECEIVE A TAG FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY AMERICANHORT. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- 11. ALL SUBSTITUTIONS OF PLANT MATERIAL ARE TO BE REQUESTED IN WRITING TO THE LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER AND M-NCPPC. FAILURE TO OBTAIN SUBSTITUTION APPROVAL IN WRITING MAY RESULT IN LIABILITY TO THE CONTRACTOR.
- 12. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED, FREE OF DISEASE, INSECT EGGS, AND LARVAE, AND SHALL HAVE ADEQUATE ROOT SYSTEMS. IN ADDITION, ALL CONTAINER-GROWN MATERIAL SHALL BE WELL-ROOTED AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION
- 13. PLANTING STOCK, SIZES, AND DENSITY SHALL BE CONSISTENT WITH THE APPROVED LANDSCAPING PLAN. SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.
- 14. SHADE TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT FLARE TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.
- 15. WHERE TREES ARE TO BE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.
- 16. SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE HEIGHT OF THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.

BED PREPARATION

PLANT SELECTION

- 18. NO PLANTING MATERIAL SHALL BE INSTALLED UNTIL THE MICRO-BIORETENTION FACILITY HAS BEEN FLOODED (PUDDLED) AND RESTORED TO THE PROPER DESIGN ELEVATION.
- 19. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.
- 20. THE DIAMETER OF THE PLANTING PIT MUST BE A MINIMUM OF TWO TIMES THE DIAMETER OF THE ROOT BALL OF THE TREE.
- 21. THE PLANTING PIT SHALL BE DEEP ENOUGH TO ALLOW BETWEEN 2" 3" OF THE EXPOSED ROOT FLARE TO BE ABOVE THE EXISTING GRADE AFTER SETTLING. LOOSE SOIL AT THE BOTTOM OF THE PIT SHALL BE TAMPED BY HAND.

PLANT INSTALLATION

- 22. FOR INFORMATION REGARDING APPROPRIATE PLANTING PERIOD FOR DIFFERENT SPECIES, SEE THE LATEST EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES FROM THE LANDSCAPE CONTRACTORS ASSOCIATION, SECTION 1.12 (A-G).
- 23. GROUPS OF SHRUBS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS UNLESS OTHERWISE NOTED. TREES LOCATED WITHIN FOUR FEET OF SHRUB BEDS SHALL SHARE SAME MULCH BED.
- 24. ALL TREES ARE TO BE LOCATED A MINIMUM DISTANCE OF 5' FROM ALL UTILITY BOXES, 5' FROM A STORM DRAIN INLET OR MANHOLE, 10' FROM A FIRE HYDRANT, 15' FROM ANY PUBLIC STREET LIGHT, 5' FROM ANY DRIVEWAY APRONS, 20' FROM ANY TRAFFIC CONTROL SIGN, AND AT LEAST 30' FROM ANY INTERSECTION.
- 25. TREES SHALL BE LOCATED A MINIMUM OF 3 FEET FROM WALLS AND WALKS WITHIN THE PROJECT. IF CONFLICTS ARISE BETWEEN ACTUAL SIZE OF AREA AND PLANS, THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE OWNER OR LANDSCAPE ARCHITECT WILL RESULT IN THE CONTRACTOR'S LIABILITY TO RELOCATE MATERIALS.
- 26. LARGE GROWING PLANTS ARE NOT TO BE PLANTED IN FRONT OF WINDOWS, UNDER BUILDING OVERHANGS, OR IN DRAINAGE SWALES. SHRUBS PLANTED NEAR HVAC UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN 1-FOOT AIRSPACE BETWEEN UNIT AND PLANT.
- 27. THE CONTRACTOR MAY SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.
- 28. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSER UNITS SHALL BE PLANTED AS REQUIRED TO SCREEN THE UNITS. SHOULD THE CONDENSER UNITS BE INSTALLED IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE PLAN IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE MATERIALS AROUND THE CONDENSERS AND TO ADJUST OTHER ADJACENT PLANTING ACCORDINGLY.
- 29. SHRUBS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS WHERE MASSING IS INDICATED
- 30. THE PLANT SHALL BE REMOVED FROM THE CONTAINER AND PLACED IN THE PLANTING PIT BY LIFTING AND CARRYING THE PLANT BY ITS ROOT BALL (NEVER LIFT BY BRANCHES OR TRUNK). TAGS AND TWINE ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-HALF ON ALL B&B PLANT MATERIAL.
- 31. SET THE PLANT STRAIGHT AND IN THE CENTER OF THE PIT SO THAT THE EXPOSED ROOT FLARE IS APPROXIMATELY 2" 3" ABOVE THE FINAL GRADE.
- 32. BACKFILL PLANTING PIT WITH PLANTING MEDIA.
- 33. MAKE SURE THE PLANT REMAINS STRAIGHT DURING BACKFILLING PROCEDURE.
- 34. NEVER COVER THE TOP OF THE ROOT BALL WITH SOIL. SOIL SHALL TAPER FROM THE TOP EDGE OF THE ROOT BALL TO THE PROPOSED GRADE. WHERE THE ROOT BALL MEETS THE PROPOSED GRADE, MOUND SOIL IN A 3"-HIGH RING AROUND THE EXPOSED ROOT BALL. CROWN OF ROOT FLARE SHALL BE 1/2" - 3" HIGHER (AFTER SETTLING) THAN ADJACENT SOIL.
- 35. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS, OR, IF CONDITIONS REQUIRE IT, TREES MAY BE BRACED BY USING ONE OF THE METHODS FOUND IN THE MOST RECENT EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA, SECTION 5.0 BRACING PROCEDURES. TREES THAT MUST BE BRACED SHALL INCLUDE BUT NOT BE LIMITED TO THOSE PLANTED IN THE ENGINEERED SOIL MEDIA IN THE BOTTOM OF A STORMWATER MANAGEMENT FACILITY AND THOSE PLANTED ON SIDE SLOPES OF A FACILITY. ALL OTHER TREES SHALL BE EVALUATED FOR BRACING ON AN INDIVIDUAL BASIS. AFTER ONE YEAR, IT IS THE OWNER'S RESPONSIBILITY TO REMOVE ALL BRACING MATERIALS UNLESS A TREE'S GROWING CONDITIONS WARRANT OTHERWISE
- 36. SPREAD MULCH. THE MULCH SHALL BE DOUBLE SHREDDED HARDWOOD BARK FOR TREES AND SHRUBS.

PLANTING NON-GRASS GROUNDCOVER

- 37. THE GROUNDCOVER PLANTING HOLES SHALL BE DUG THROUGH THE MULCH WITH ONE OF THE FOLLOWING: HAND TROWEL, SHOVEL, BULB PLANTER, OR HOE (THIS DOES NOT APPLY TO GRASSES OR LEGUMES).
- 38. BEFORE PLANTING, BIODEGRADABLE POTS SHALL BE SPLIT AND NON-BIODEGRADABLE POTS SHALL BE REMOVED. ROOT SYSTEMS OF ALL POTTED PLANTS SHALL BE SPLIT OR CRUMBLED.
- 39. THE GROUNDCOVER SHALL BE PLANTED SO THAT THE ROOTS ARE SURROUNDED BY THE SOIL BELOW THE MULCH. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH THE EXISTING GRADE. THE ROOTS OF BARE ROOT PLANTS SHALL BE COVERED TO THE CROWN
- 40. THE ENTIRE GROUNDCOVER BED SHALL BE THOROUGHLY WATERED.

PLANTING GRASS GROUND COVER

- 41. GRASSES AND LEGUME SEED SHALL BE TILLED INTO THE SOIL TO A DEPTH OF AT LEAST L/2 INCH BY EITHER HARROWING OR DISCING. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING TECHNIQUES ABOVE.
- 42. THE CONTRACTOR SHALL BE RESPONSIBLE TO REGRADE, HYDRO-SEED, STRAW MULCH, AND TACK ALL LAWN AREAS DISTURBED AS THE RESULT OF HIS WORK.

CLEAN UP

- 43. FINAL CLEAN UP SHALL BE THE RESPONSIBILITY OF THE INSTALLER AND CONSIST OF REMOVING ALL TRASH AND MATERIALS INCIDENTAL TO THE PROJECT AND PROPERLY DISPOSING OF THEM OFF SITE. IN ADDITION THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE ANY AREAS OF EXISTING PLANTS WHICH ARE TO
- 44. THERE SHALL BE NO OPEN BURNING ON-SITE
- 45. THE CONTRACTOR SHALL REPLACE OR REPAIR AT NO COST TO THE OWNER, ALL SITE AREAS OR SURROUNDING ITEMS DAMAGED BY WORK OF HIS CONTRACTS.
- 46. DURING LANDSCAPE WORK, STORE MATERIALS AND EQUIPMENT WHERE DIRECTED. KEEP PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION.

POST PLANTING

- 47. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE, INCLUDING SHRUBS AND GROUNDCOVER, AND SHALL MAINTAIN AREA IN A WEED AND DEBRIS FREE CONDITION, THROUGHOUT THE ONE YEAR GUARANTEE PERIOD.
- 48. THE CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.
- 49. DEAD PLANTS ARE TO BE REMOVED FROM THE JOB BY THE CONTRACTOR ON A MONTHLY BASIS. THE CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED AND PRESENT A COPY OF THE LIST TO THE OWNER AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.
- 50. THE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. THE CONTRACTOR MUST CONTACT THE OWNER AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). THE CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.

BIORETENTION FACILITY LANDSCAPE MAINTENANCE GUIDELINES

Bioretention landscaping initially requires intensive maintenance, including weeding, supplemental watering, re-planting, re-mulching, and monitoring of plant health and growth. Maintenance needs become lower over

General Maintenance Issues

At the end of the first year, herbaceous plants should cover at least 50% of the originally proposed planted area. If less than 50% is covered, the facility should be replanted to a density as proposed on the Stormwater Management Landscape Plan. After 3 full years, the entire area should be covered with healthy growth at a density at least as great as proposed on the Stormwater Management Landscape Plan.

Do not apply fertilizer unless soil tests indicate a deficiency.

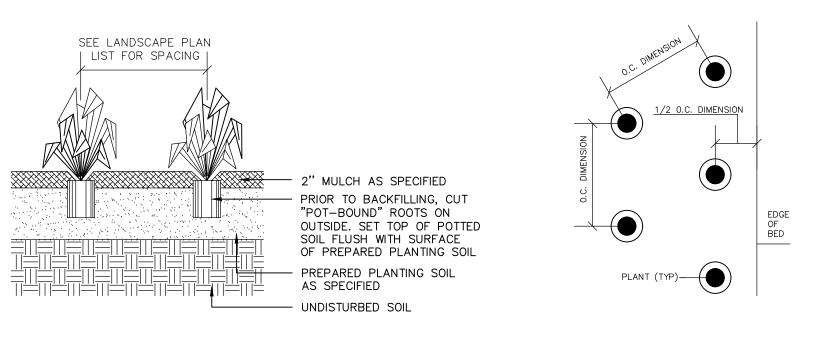
Do not apply on a scheduled basis. Apply ONLY after non-chemical methods (biological, physical, cultural) have been attempted and do not keep pests under control. Use the least toxic and least persistent pesticide that can provide adequate control. Apply only when the pesticide is least likely to enter runoff; do not apply if rain is expected.

Spot treat with an herbicide approved for aquatic use.

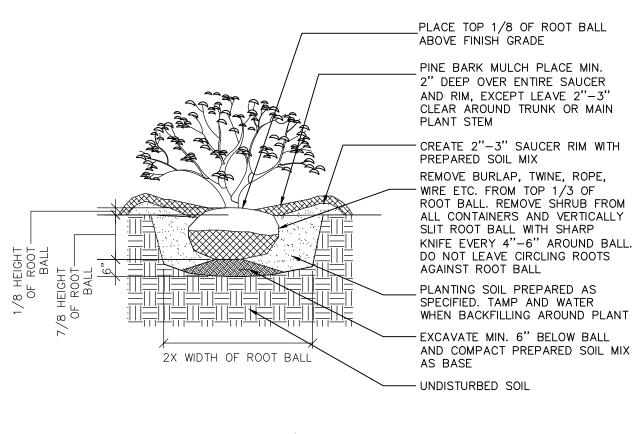
Do not mow within the facility except where turf grasses are present. When mowing turf grasses, clippings should remain on the turf. Do not allow clippings to fall in the facility where plants other than turf grasses exist.

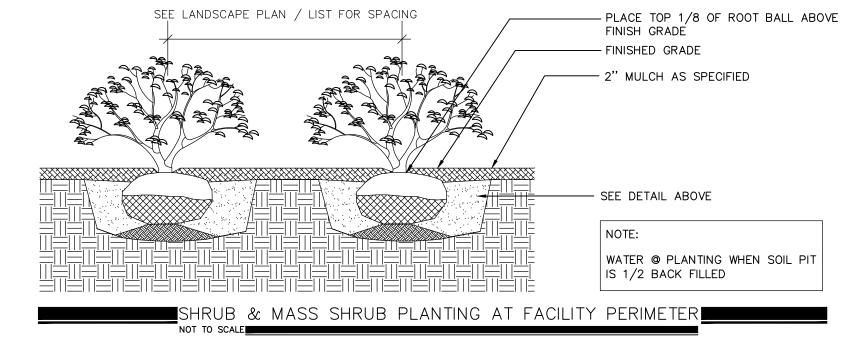
should remain on the turn. Do not allow dippings to fail in the facility where plants other than turn grasses exist.					
PLANT MAINTENANCE SCHEDULE					
MATERIAL	TASK	FREQUENCY	NOTES		
TREES AND SHRUBS	Watering (First 2 months after planting)	Deep watering once every 3 days	Adjust frequency to accommodate rainfall amounts and high summer temperatures.		
	of second growing season)	Deep watering once per week unless ½" rain is received or more frequently as needed during drought			
	Watering (After first 2 growing seasons)	As needed during drought			
	Pruning diseased or damaged growth	When it is found	DO NOT SHEAR PLANTS. Preferred pruning times and methods may		
	Pruning excess growth	Generally, from trees in late winter, and from shrubs soon after flowering is complete	vary by species. The Maryland Cooperative Extension, the Maryland Department of Natural Resources, and the USDA Forest Service, among other organizations, offer additional information.		
	Remove diseased or dead plants	Once in Spring and once in Fall, minimum	Replace with new material.		
HERBACEOUS PLANTS	Watering (First 2 months after planting)	Deep watering once every 3 days	Adjust frequency to accommodate rainfall amounts and high summer temperatures.		
	Watering (Remainder of first growing season and all of second growing season)	Deep watering once per week unless ½" rain is received or more frequently as needed during drought			
	Watering (After first 2 growing seasons)	As needed during drought			
	Remove diseased or dead plants	Once in Spring and once in Fall, minimum	Replace with new material if total coverage of facility falls below 50%.		

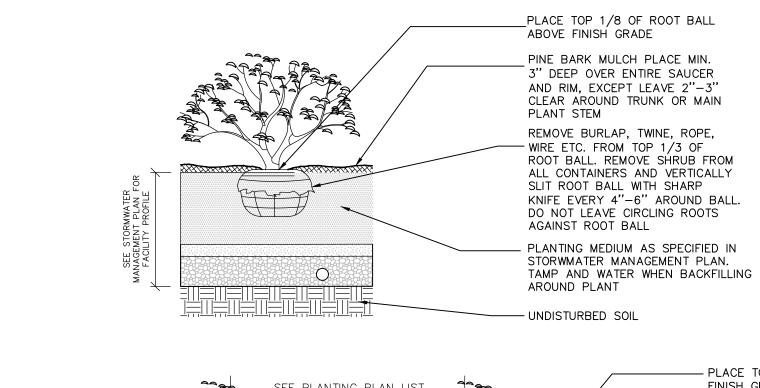
GENERAL MAINTENANCE SCHEDULE				
TASK	FREQUENCY	NOTES		
Plant Inspection	Once every 2 weeks in Spring and Summer, monthly in Fall	Visually inspect plants for disease or pest problems.		
Remove Litter and Debris	Whenever found	Includes animal waste, fallen twigs and branches and past seasons' decaying herbaceous material.		
Mulch Inspection and Maintenance	Monthly	Replace or re-spread mulch as needed to maintain appropriate depth per specifications. However, do not allow accumulated organic matter to exceed specific mulch depth.		
Weeding (First 2 growing seasons)	Every 2 weeks from April through October	Hand-pull weeds or use hand-held tools such as hoes Do not use herbicides or mechanical cultivators. Immediately remove all exotic/invasive species that appear. Remove woody plant seedlings that have self-propagated. If desired, native non-invasive herbaceous species may be left to provide additional diversity.		
Weeding (After first 2 growing seasons)	Once a month from April through October, or as needed			
Spring Clean-Up Annually February through Ma		Remove dead foliage from perennials and ornaments grasses. Remove fallen twigs, branches and leaf debris.		

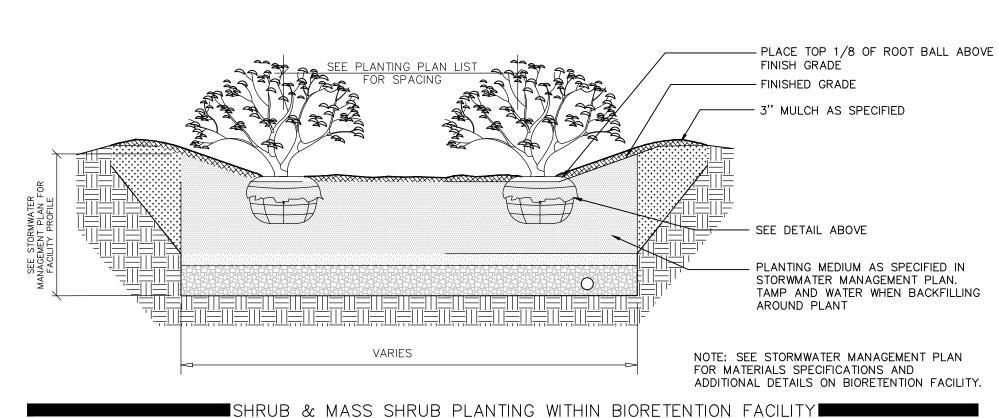


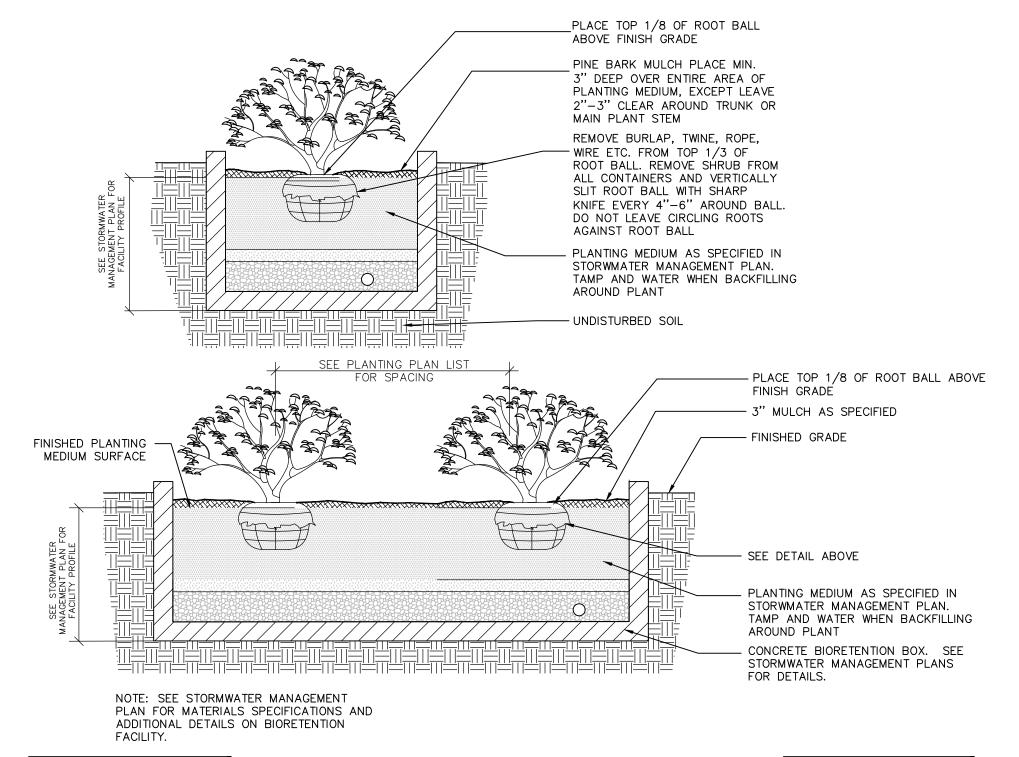
HERBACEOUS PLANTING & TRIANGULAR PLAN SPACING**i**











lacktriangle shrub planting within bioretention box lacktriangle

SM#285890 SC028SWLSDTLS SC#286335

SWM LANDSCAPE NOTES & DETAILS

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Professional Certification I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Landscape Architect under the Laws of the State of Maryland, Lic. No. 615 Exp. Date. 09.10.2021

PROFESSIONAL SEAL:

PRINTS ISSUED

DESCRIPTION: BID DOCUMENTS 10/21/2020

> **GAITHERSBURG ELEMENTARY**

> > SCHOOL #8

MONTGOMERY **COUNTY PUBLIC**

SHEET TITLE:

SOIL EROSION, SEDIMENT CONTROL **AND STORMWATER MANAGEMENT PLAN**

PROJECT NO: 12/04/2020 SCALE:

SHEET NO:

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